Maine Weekly Influenza Surveillance Report

February 25, 2009

Synopsis

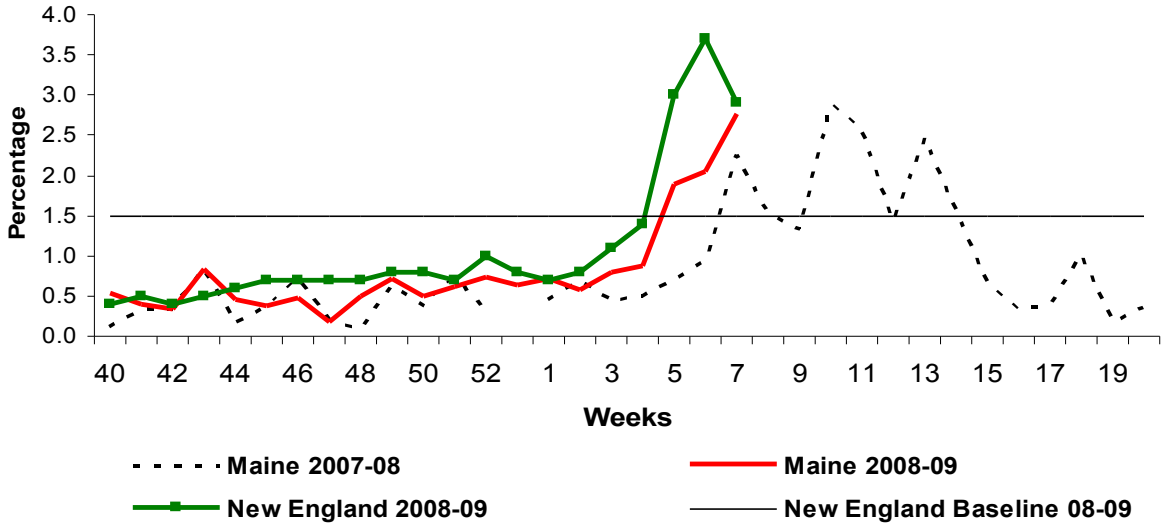
During the week ending February 21st, 2009 (MMWR week 7)*, Maine reported widespread influenza activity. This week 86 cases of influenza were lab confirmed by culture or PCR. Eighty one cases were confirmed influenza A and five cases were confirmed influenza B. To date, 31 positive influenza A samples have been subtyped by the Maine Health and Environmental Testing Laboratory (HETL): 29 were A H1, and two were A H3. There were two new outbreaks of influenza-like illness reported during week 7, both in long term care facilities, and both lab confirmed to be influenza A. Outpatient influenza-like illness visits continued to increase this week; deaths attributable to pneumonia or influenza also increased.

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending February 21st, 2009, 2.8% of outpatient visits reported by eight Maine Sentinel Providers were for influenza-like illness (ILI). ILI is defined as fever (≥100° F / ≥37.8° C) AND cough or sore throat in the absence of a known cause. In the New England States, 2.9% of outpatient visits were attributed to influenza-like illness during week 7. Maine remains above the New England baseline.

Outpatient Visits for Influenza-like Illness – Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

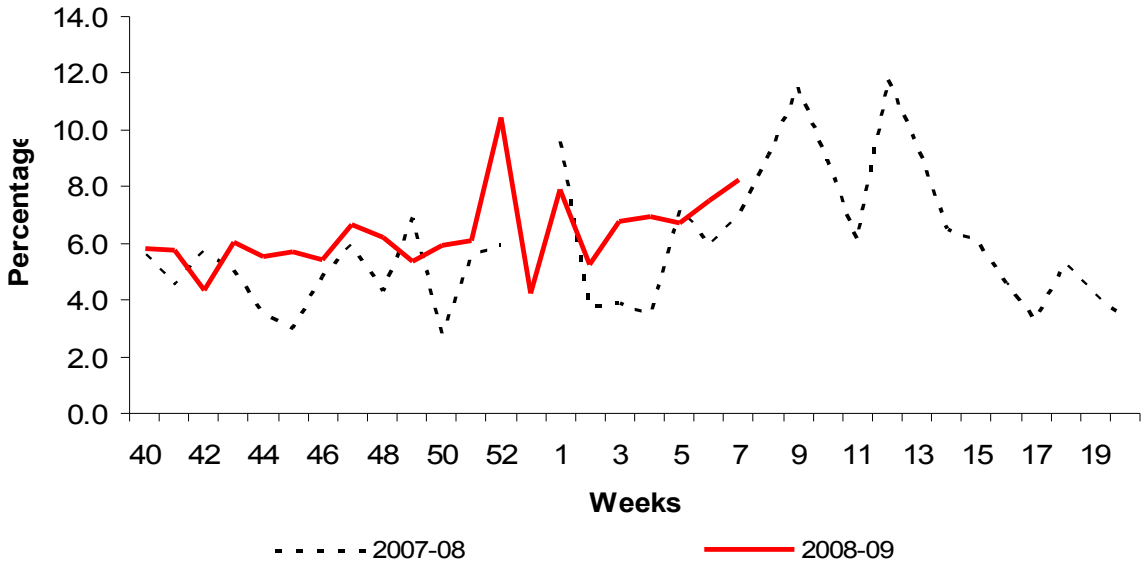
* At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending February 21st, 2009, 8.3% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

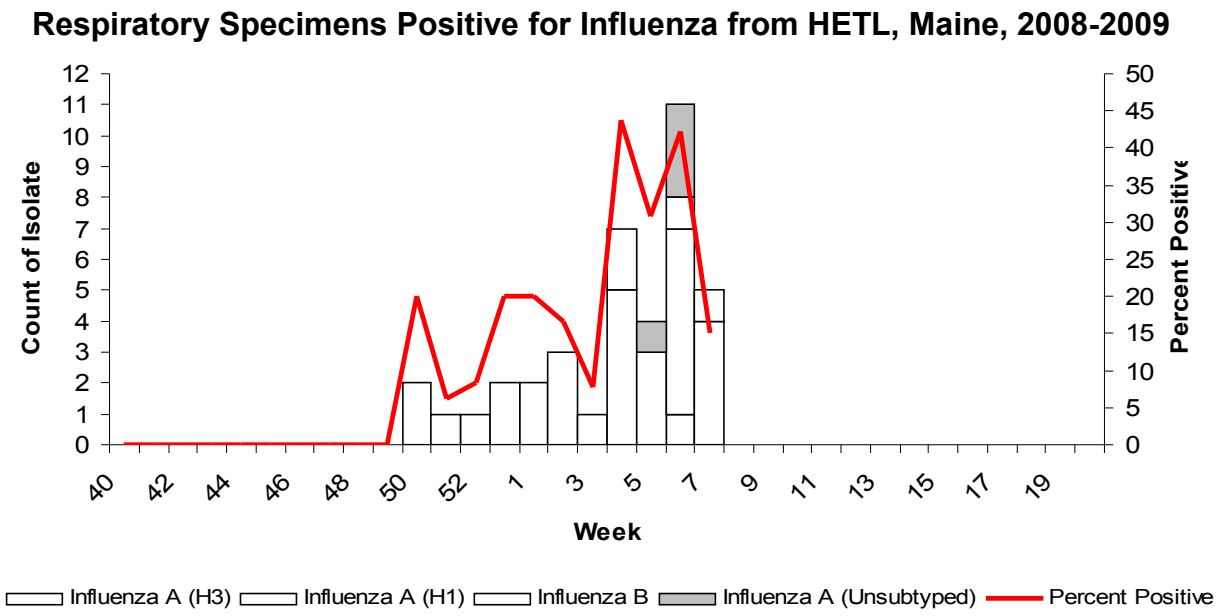
Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09



Laboratory Reporting

During the week ending February 21st, 2009, 33 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). Five (15.2%) tested positive for influenza. Four were positive for influenza A, H1, and one was positive for influenza B.

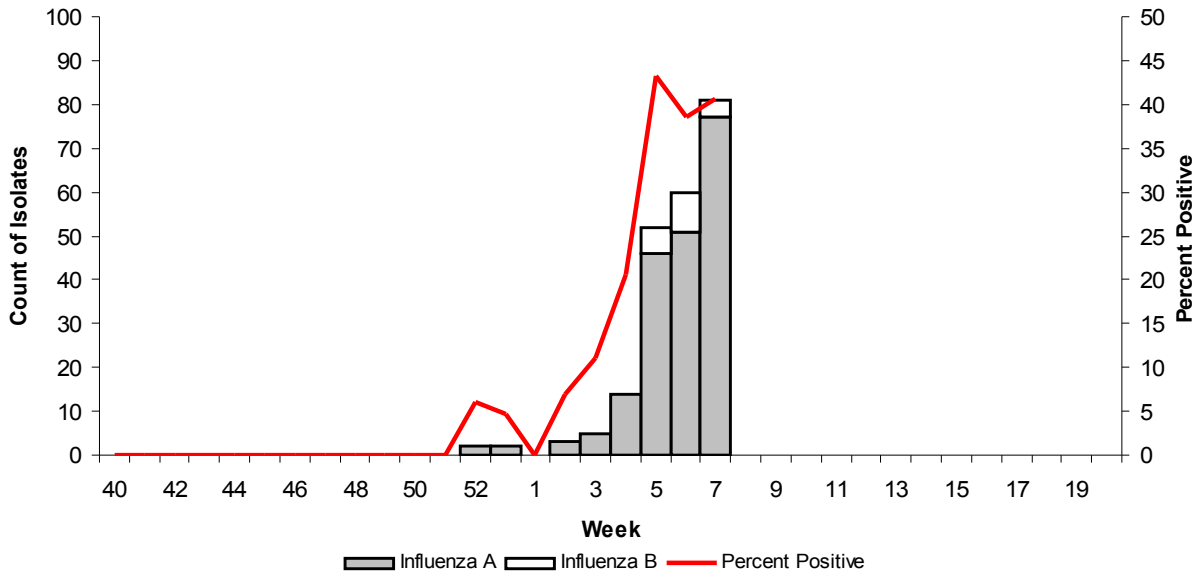
To date, 216 samples have been submitted, 39 (18.1%) were positive for influenza: 29 for influenza A H1, two for influenza A H3, four for influenza A unsubtyped, and four for influenza B.



During the week ending February 21st, 2009, 199 samples were submitted for testing to two private reference laboratories, 77 tested positive for influenza A and four tested positive for influenza B. Thirty six samples were positive for RSV.

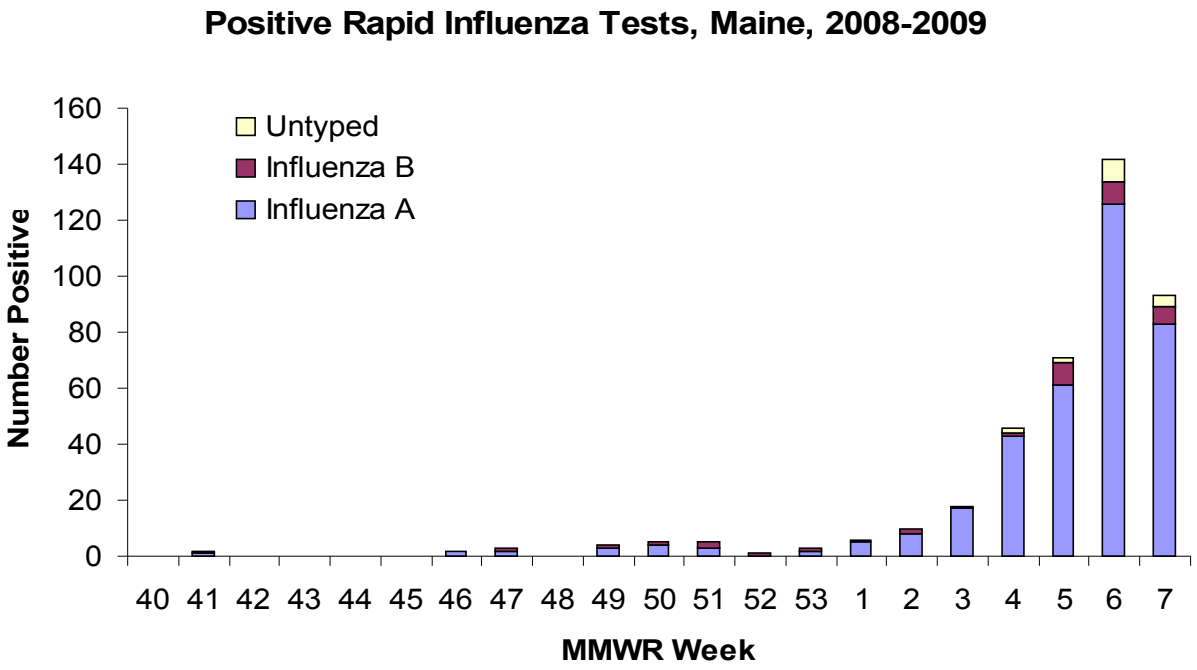
A combined total of 1,033 specimens have been submitted for respiratory testing to two private labs. To date, 200 samples were positive for influenza A, 19 samples were positive for influenza B, 96 samples were positive for RSV, ten samples were positive for parainfluenza 3, four samples were positive for adenovirus, and two samples were positive for enterovirus.

Respiratory Specimens Positive for Influenza from Two Reference Laboratories, Maine, 2008 - 2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending February 21st, 2009, 93 samples tested positive using rapid testing, 83 for influenza A, six for influenza B, and four untyped samples. A combined total of 411 positive rapid tests have been reported this season. 360 were positive for influenza A, 34 were positive for influenza B, and 17 were not typed.



Outbreaks

During the week ending February 21st, 2009, 2 outbreaks of influenza-like illness were reported, both in a long term care facilities. The outbreaks were in the Midcoast and Western districts and had attack rates of 19% and 2% respectively. Both outbreaks were confirmed to be caused by influenza A. To date, 20 outbreaks of influenza-like illness have been reported; eight in long term care facilities and 12 in schools.

Influenza-like illness outbreaks by selected characteristics – Maine, 2008-09

	Facility Type*	District	Date Reported	Attack Rate (%)		Hospital-izations	Deaths	Vaccination rate (%)		Lab-confirmed
				Resident	Staff	#	#	Resident	Staff	
1	LTC	Cumberland	11/21/2008	6	1	0	0	100	68	No
2	LTC	Mid Coast	1/22/2009	4	0	2	0	96	50	Influenza A
3	LTC	Western	1/26/2009	2	0	1	0	99	50	Influenza A
4	LTC	Cumberland	1/30/2009	2	0	1	0	96	64	Influenza A
5	School	York	2/2/2009	34	^	^	^	^	^	Influenza A
6	School	Penquis	2/4/2009	1	0	1	^	^	^	Influenza A
7	School	Mid Coast	2/9/2009	26	13	^	^	^	^	No
8	School	Mid Coast	2/9/2009	16	^	^	^	^	^	No
9	School	York	2/10/2009	^	^	^	^	^	^	^
10	LTC	York	2/10/2009	3	^	^	^	^	^	Influenza A
11	School	Downeast	2/10/2009	4	^	^	^	^	^	Influenza A
12	School	Mid Coast	2/10/2009	19	^	^	^	^	^	Influenza A & B
13	School	Mid Coast	2/2/2009	21	^	^	^	^	^	Influenza A
14	LTC	Mid Coast	2/10/2009	^	^	^	^	^	^	^
15	School	Mid Coast	2/10/2009	46	^	^	^	^	^	Influenza A
16	School	York	2/11/2009	15	^	^	^	^	^	^
17	School	York	2/11/2009	15	^	^	^	^	^	Influenza B
18	School	Western	2/13/2009	39	^	^	^	^	^	Influenza A
19	LTC	Mid Coast	2/17/2009	19	^	^	^	95	20	Influenza A
20	LTC	Western	2/19/2009	2	^	^	^	^	^	Influenza A

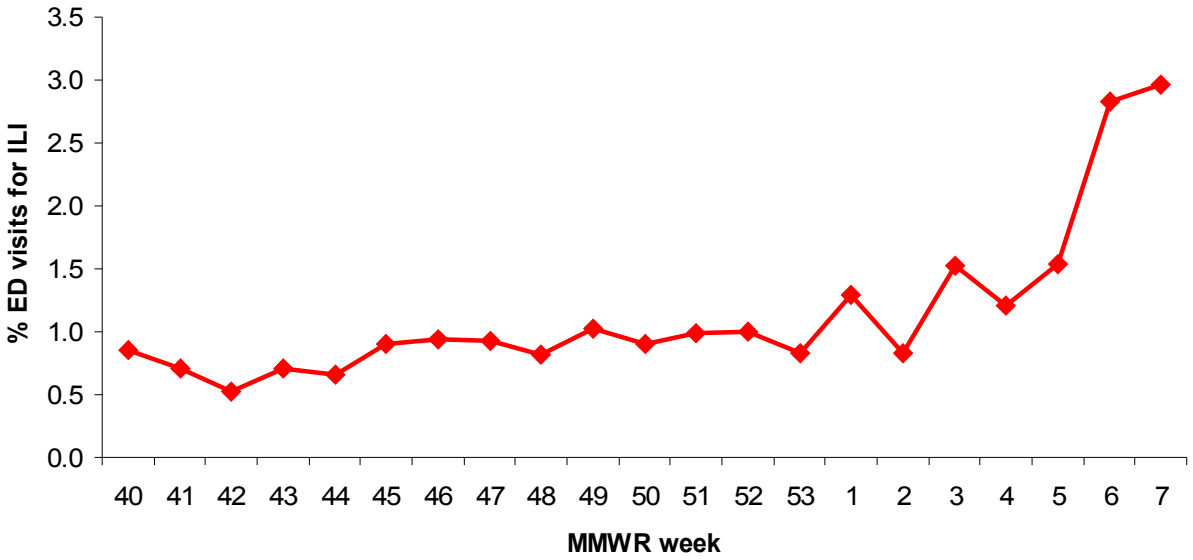
* Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥1 patients with ILI or lab-confirmed influenza with symptom onset ≥48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as ≥15% absentee rate among student population due to ILI or lab-confirmed influenza.
^ Data unavailable
NA indicates not applicable

**Maine DHHS Districts:
York District: York county
Cumberland District: Cumberland county
Western District: Franklin, Oxford, and Androscoggin counties
Mid Coast District: Waldo, Knox, Lincoln and Sagadahoc counties
Central District: Somerset and Kennebec counties
Penquis District: Piscataquis and Penobscot counties
Downeast District: Washington and Hancock counties
Aroostook District: Aroostook county

Syndromic Surveillance

3.0% of visits to emergency departments at seven of Maine's hospitals were characterized as influenza-like illness during week 7, based on the patients' chief complaint.

Emergency Department Visits for ILI at Seven Hospitals – Maine, 2008-09

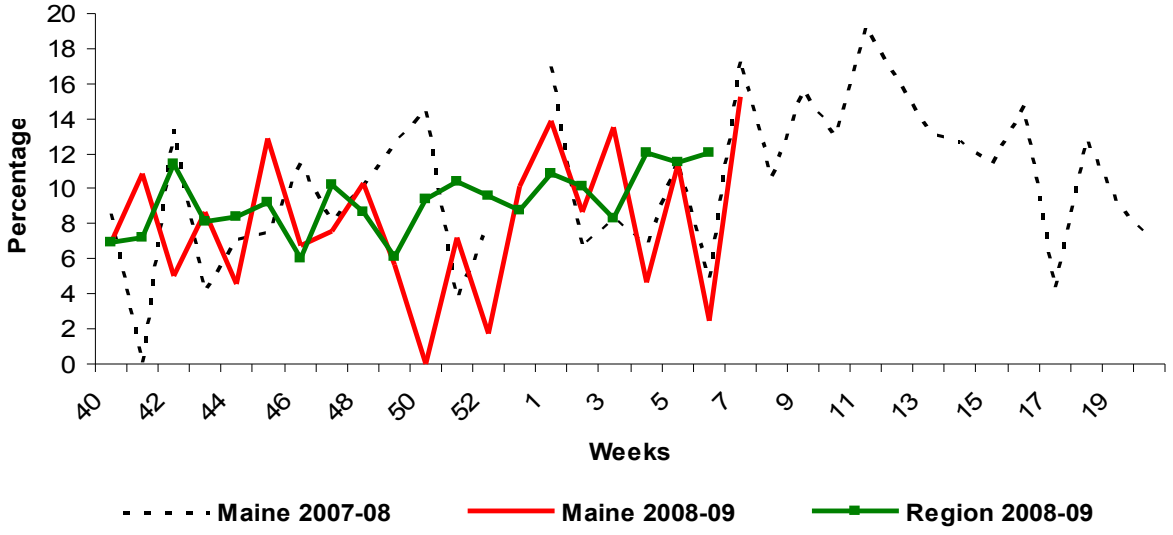


Fatalities Surveillance

Death Certificates

During the week ending February 21st, 2009, 15.2% of deaths reported by three city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza – Maine, New England and the United States, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported widespread activity for the week ending February 21st, 2009 (week 7).